



BENSBERG 

Enhancement components

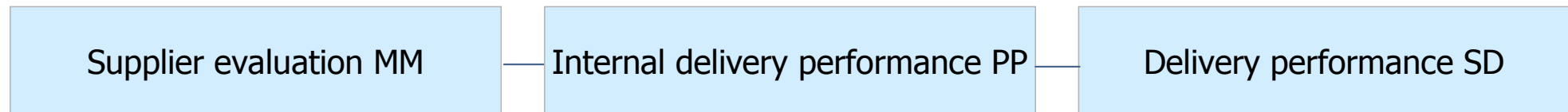
Delivery performance SD

Bensberg components

- EDI
 - DELINS
 - Deadline split EDI
 - ESA (External Service Agent)
 - Orders / MAIS
 - Credit memo procedure
 - Payment advice
- Application
 - Supplier evaluation MM
 - Internal delivery performance PP
 - Delivery performance SD

 - Requirements analysis MD04
 - Open quantities

Logistic chain



MM = Material Management
PP = Production & Planning
SD = Sales & Delivery

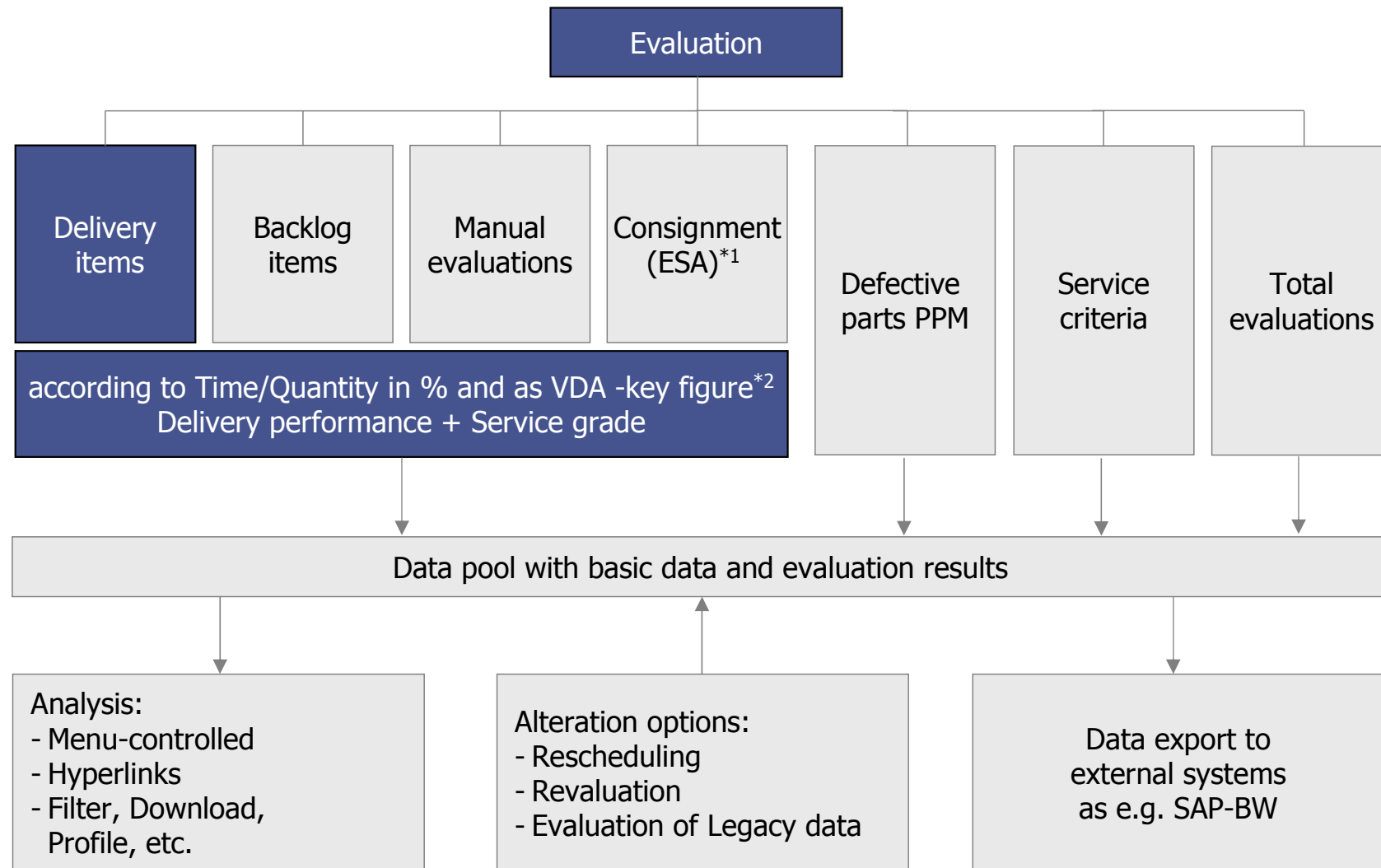
Welcome!

Welcome to the presentation of our
enhancement component

Delivery Performance SD



Overview



*1ESA = **E**xternal **S**ervice **A**gent

*2VDA = German Association of the Automotive Industry

Evaluation of *GI-items according to Time/Quantity

- Starting point: Goods issue posting in SAP-R/3
 - Saving of environment data upon the goods issue
 - Asynchronous evaluation

- According to (part of) VDA norm 5001
 - Result as VDA-key figure or in percent

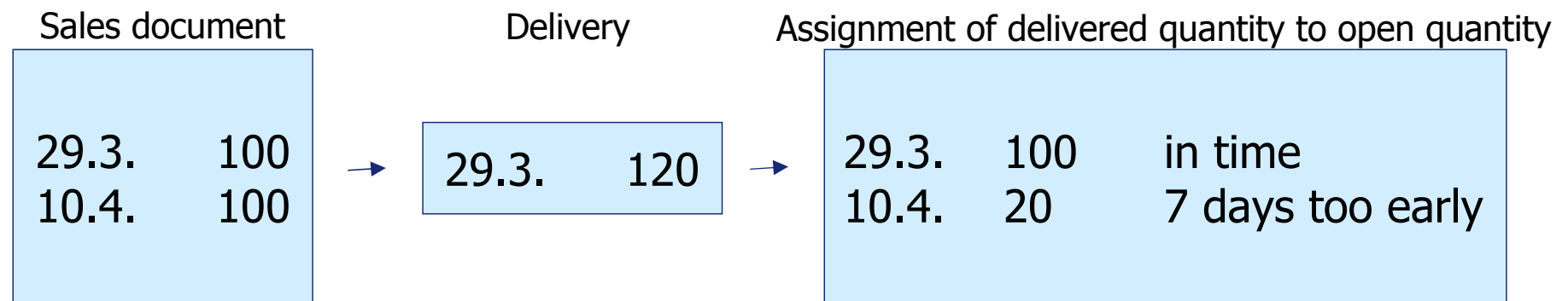
- Evaluation of Delivery performance and Service grade

- flexible setting options of evaluation parameters
 - e.g. according to Customer, Ship-to party, Plant, MRP group...
 - Tolerances for Deadline and Quantity
 - Treatment of Under- and Overdeliveries

- Special treatment of delivery schedules
- Smoothing

Evaluation according to VDA

- The evaluation of delivery performance is based on (part of) the VDA-standard norm 5001 in consideration of the evaluation parameters
- Combined evaluation of time and quantity:



- Determination of the VDA-key figure for each supplied schedule line in consideration of the proportional quantity and the time difference

Evaluation according to VDA / Percent

- General rule : the higher the VDA-key figure of a delivery item, the worse is the delivery performance
- Conversion of the VDA-key figure into percent according to the following formula:

$$\% = 100 - (n * \text{VDA-key figure})$$

n = Conversion factor, the higher the earlier 0% is achieved
(Standard = 2)

Example: VDA-key figure of 4

$$100 - (2 * 4) = 92\%$$

- Additional special procedure in case of % for separate evaluation of delivery performance and quantity reliability with limit values

Evaluation of GI*-items according to time and quantity

GI-posting in SAP-R/3

Order/ Scheduling agreement

Mengen und Termine				
	Periode	Auftragsmenge	Bestätigte Menge	ME
<input type="checkbox"/>	T 16.01.2000	210	0	ST
<input type="checkbox"/>	T 14.02.2001	0	210	ST
<input type="checkbox"/>	T			
<input type="checkbox"/>	T			
<input type="checkbox"/>	T			
<input type="checkbox"/>	T			
<input type="checkbox"/>	T			
<input type="checkbox"/>	T			
<input type="checkbox"/>	T			
<input type="checkbox"/>	T			
<input type="checkbox"/>	T			



Delivery



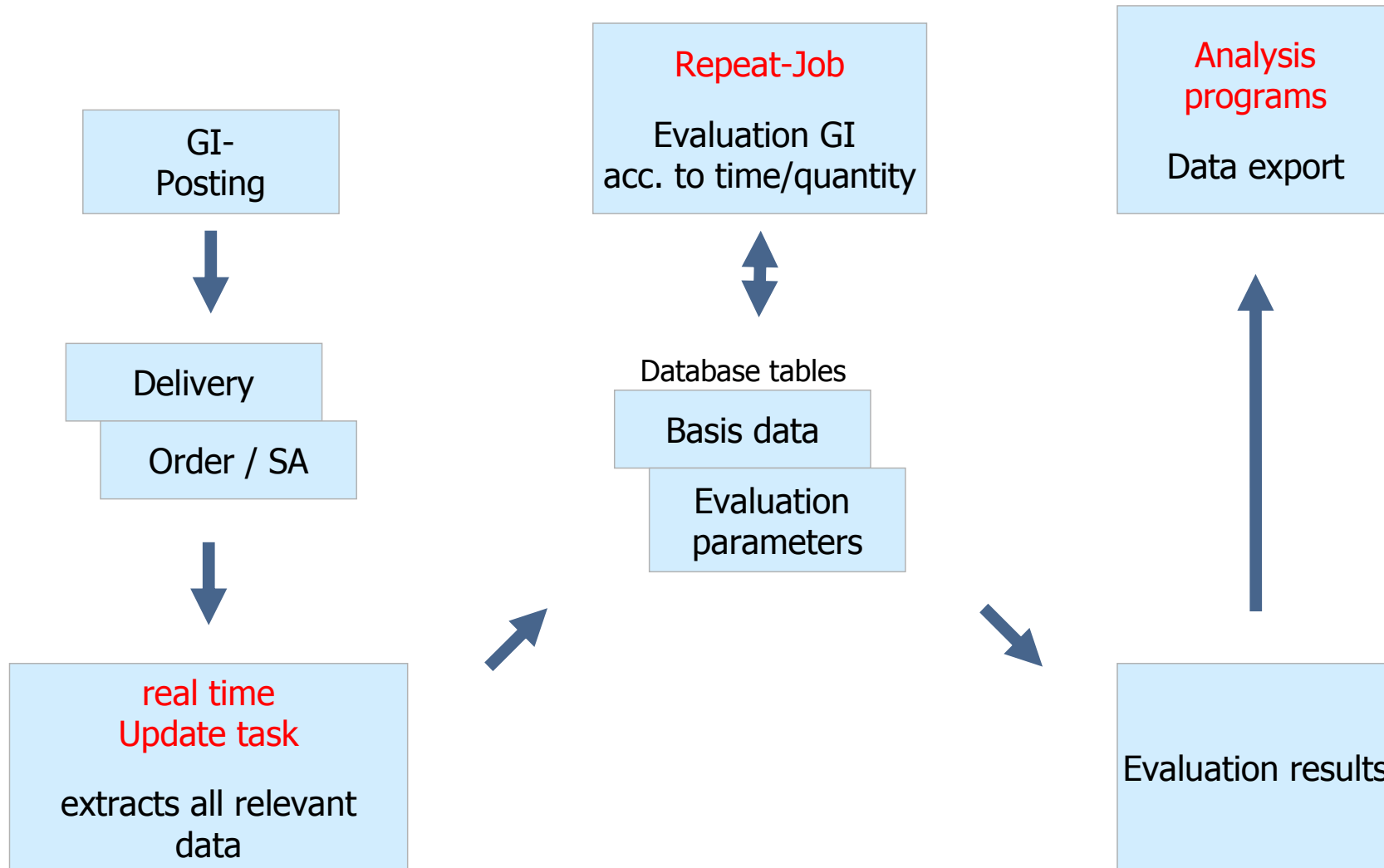
Goods issue
(GI)



Assignment
delivery quantity
and time

Evaluation of GI*-items according to Time and Quantity

Data extraction and evaluation



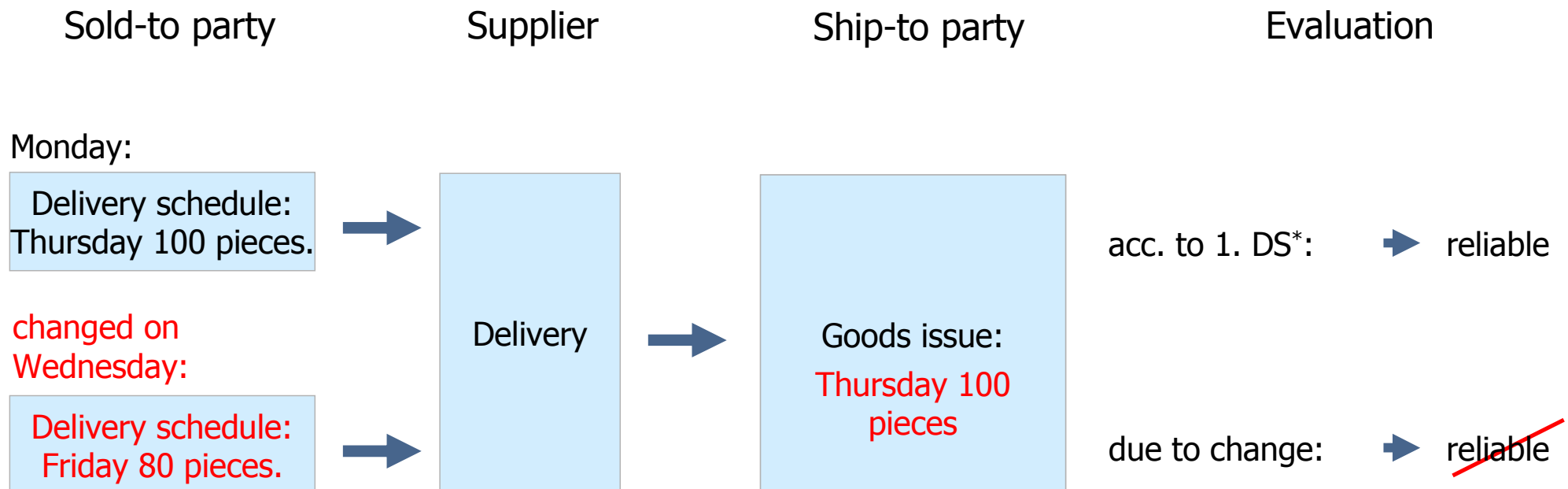
Advantage: good performance, Repeatability of the evaluation

*GI = **G**oods **I**ssue

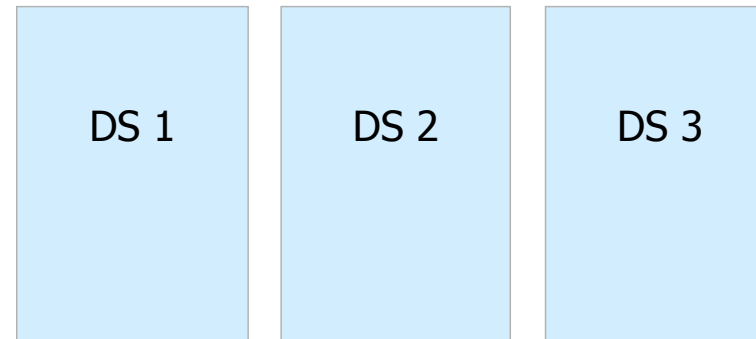
Evaluation of GI-items according to time / quantity

- Starting point: Goods issue posting in SAP-R/3
 - Saving of environment data upon the goods issue
 - Asynchronous evaluation
- according to VDA 5001 and percent
- Evaluation of delivery performance and service grade
- flexible setting options of evaluation parameters
 - e.g. according to customer, ship-to party, plant, MRP group...
 - Tolerances for deadline and quantity
 - Treatment of Under- and Overdeliveries
- **special treatment of delivery schedules**
- Smoothing

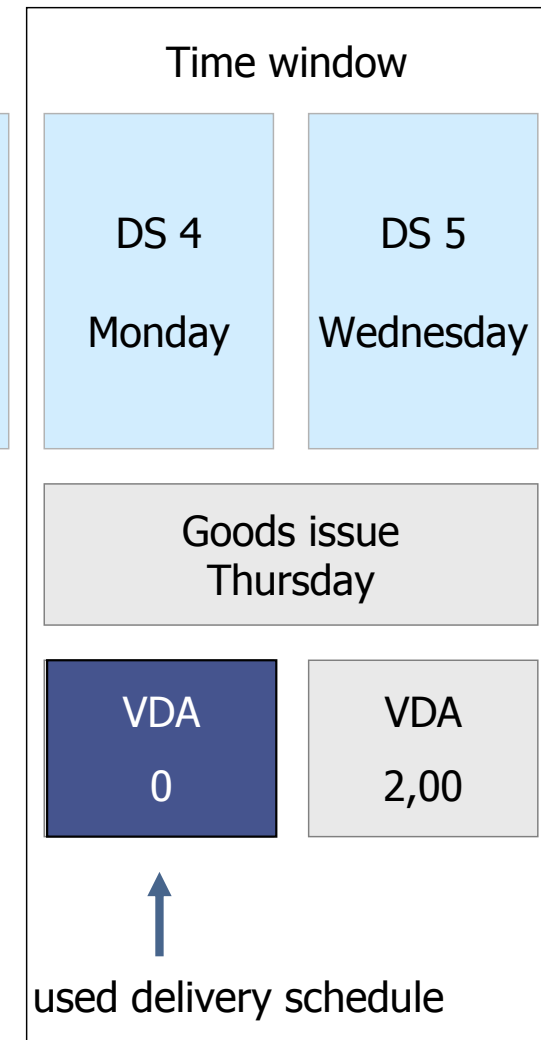
Delivery schedule treatment (scheduled)



Delivery schedule treatment (scheduled)



DS = Deliver Schedule



Punishment avoided due to:

- parallel evaluation of a delivery schedule at the moment of the creation of the delivery and of the delivery schedule at the moment of the goods issue
- consideration of the most favorable delivery schedule

Evaluation of GI-items according to time / quantity

- Starting point: Goods issue posting in SAP-R/3
 - Saving of environment data upon the goods issue
 - Asynchronous evaluation

- According to VDA norm 5001
 - Results as VDA-key figure or in %

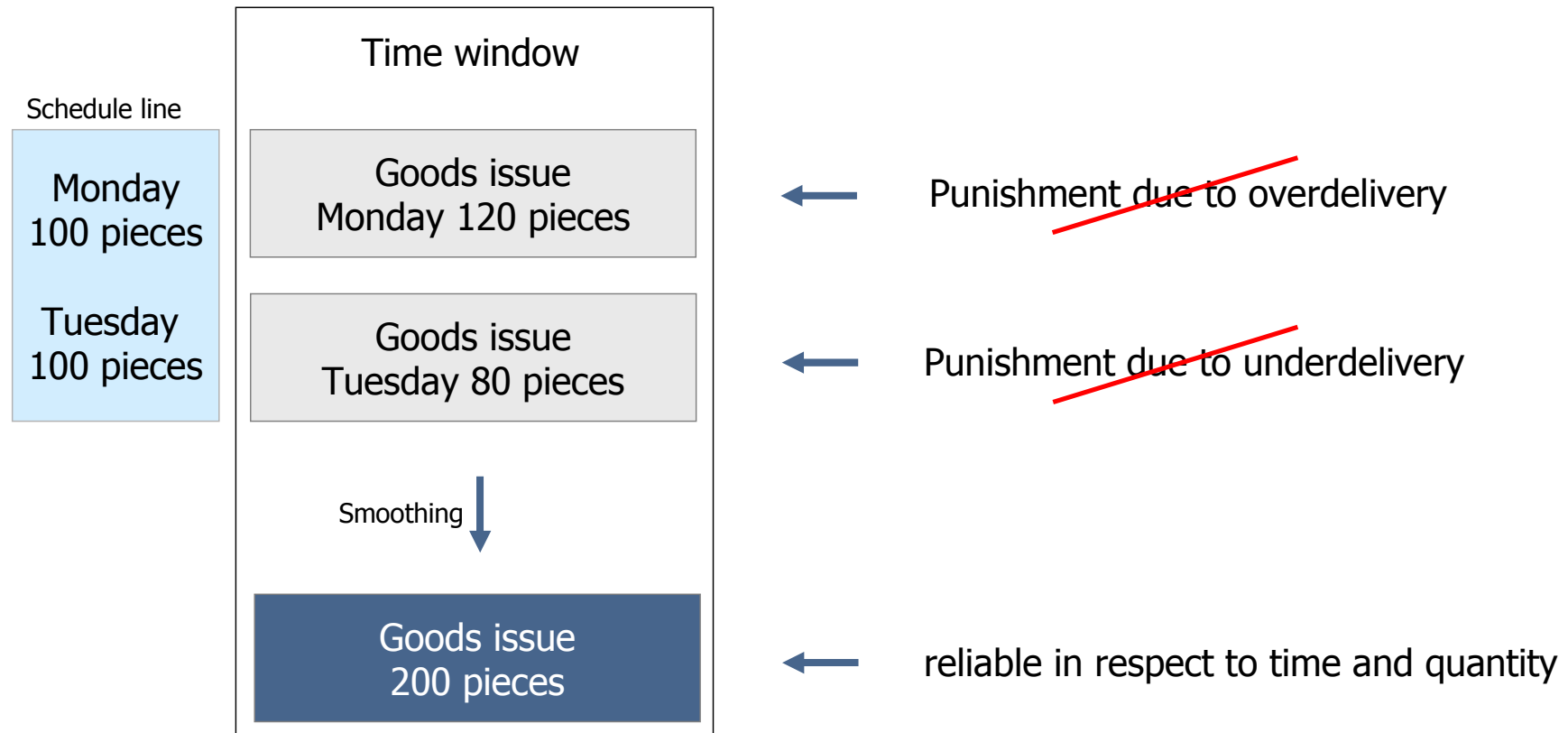
- Evaluation of delivery performance and service grade

- Flexible setting options of evaluation parameters
 - e.g. according to customer, ship-to party, plant, MRP group...
 - Tolerances for deadline and quantity
 - Treatment of Under- and Overdeliveries

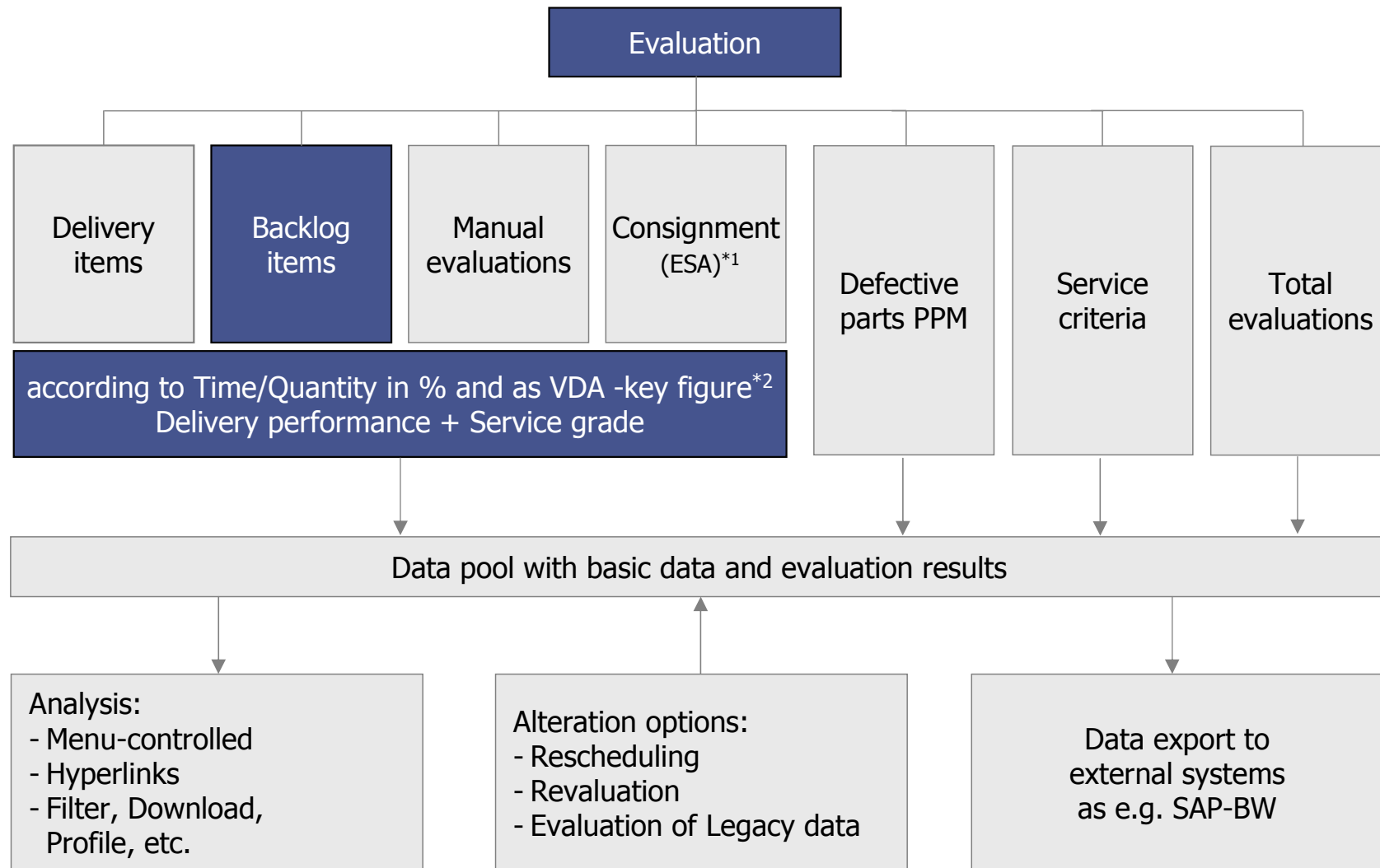
- special treatment of delivery schedules
- **Smoothing**

Smoothing

Offsetting of quantity deviations
in definable time windows (Number of days)



Overview



*1ESA = **E**xternal **S**ervice **A**gent

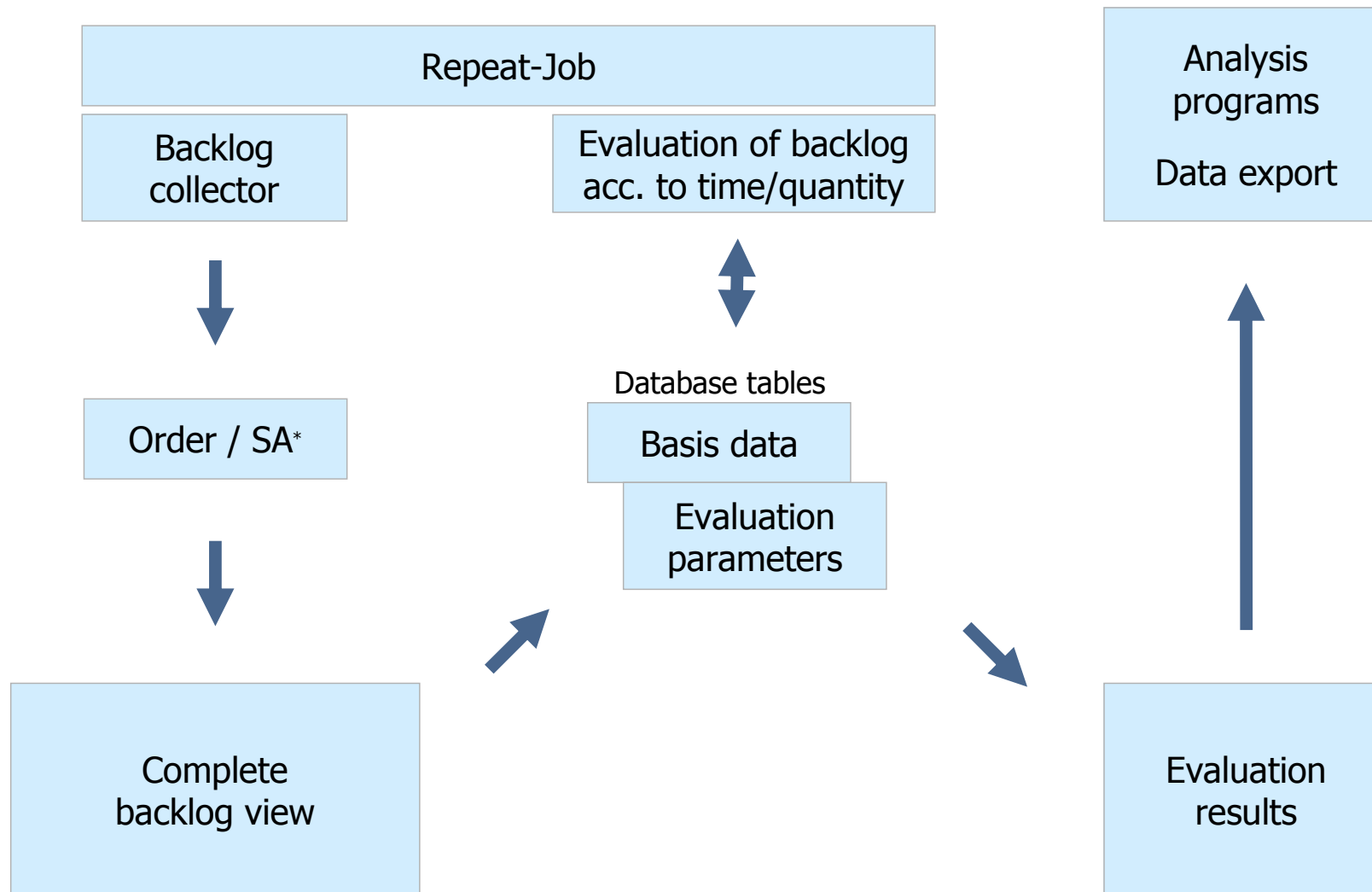
*2VDA = German Association of the Automotive Industry

Evaluation of backlogs

- Determination of backlogs at a defined point of time:
 - Schedule lines of orders and scheduling agreements with schedule line date < current date
 - leads to complete backlog view
- Evaluation as 'normal' GI
 - backlog evaluations at regular intervals (optimal: daily) show clearly a dynamic deterioration
- Histories of complete backlog views (planned)
- Consideration of backlog evaluations in the analyses is selectable

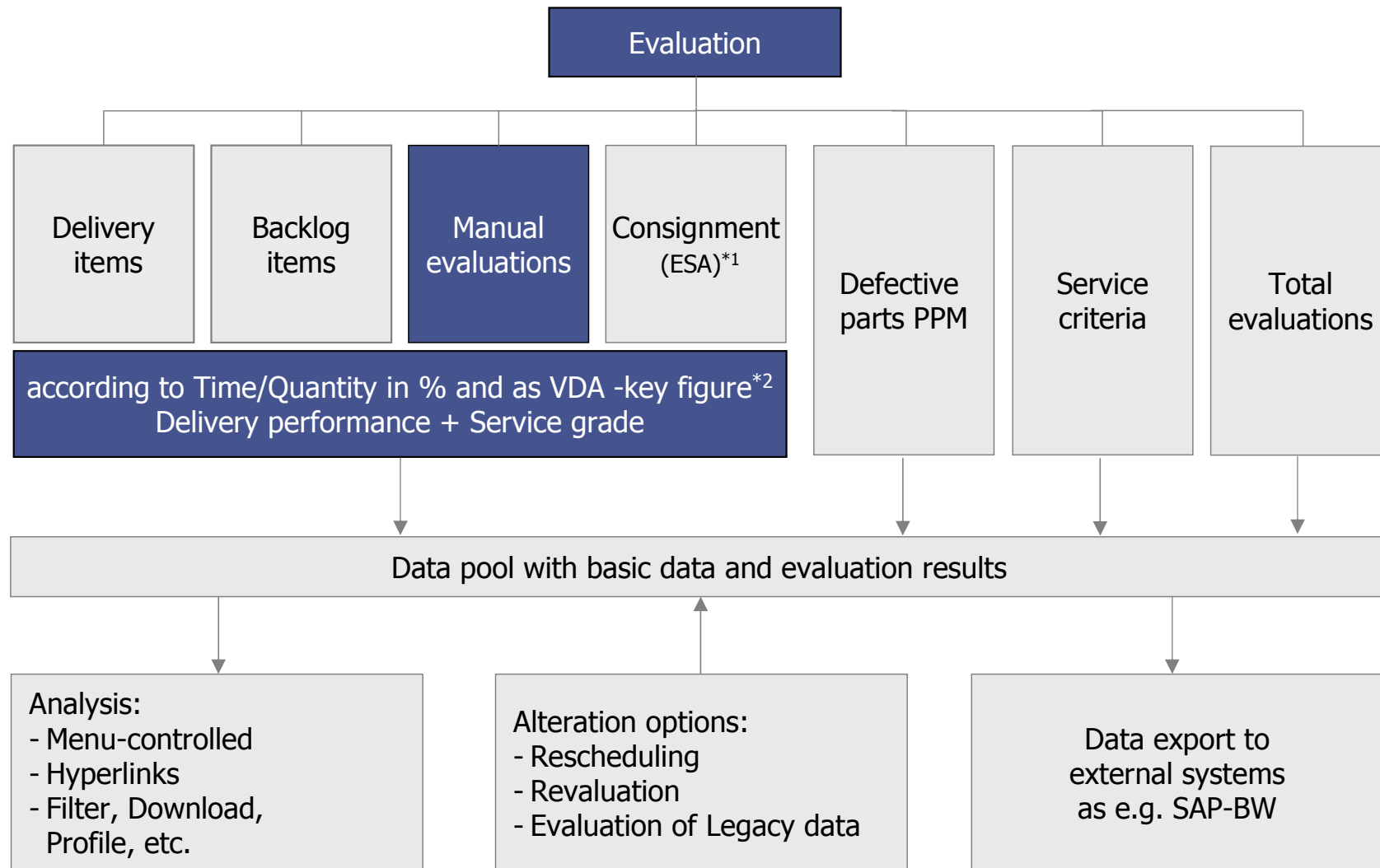
Evaluation of backlogs

Data extraction and evaluation



*SA = **S**cheduling **A**greement

Overview



*1ESA = **E**xternal **S**ervice **A**gent

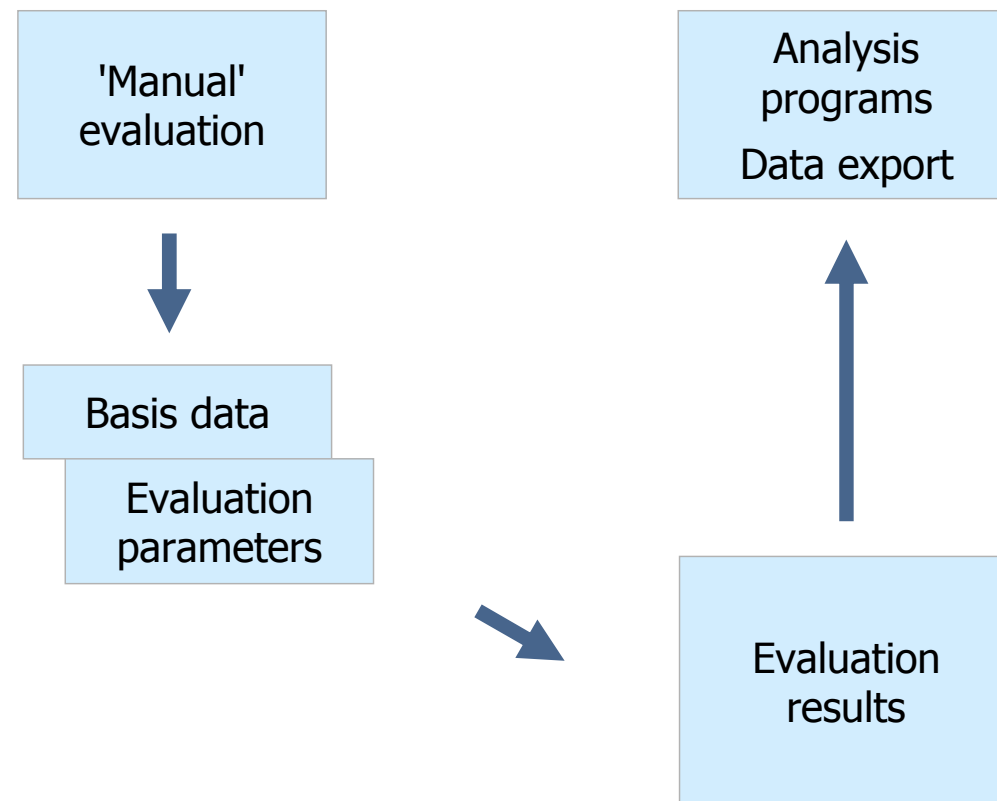
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Manual evaluations

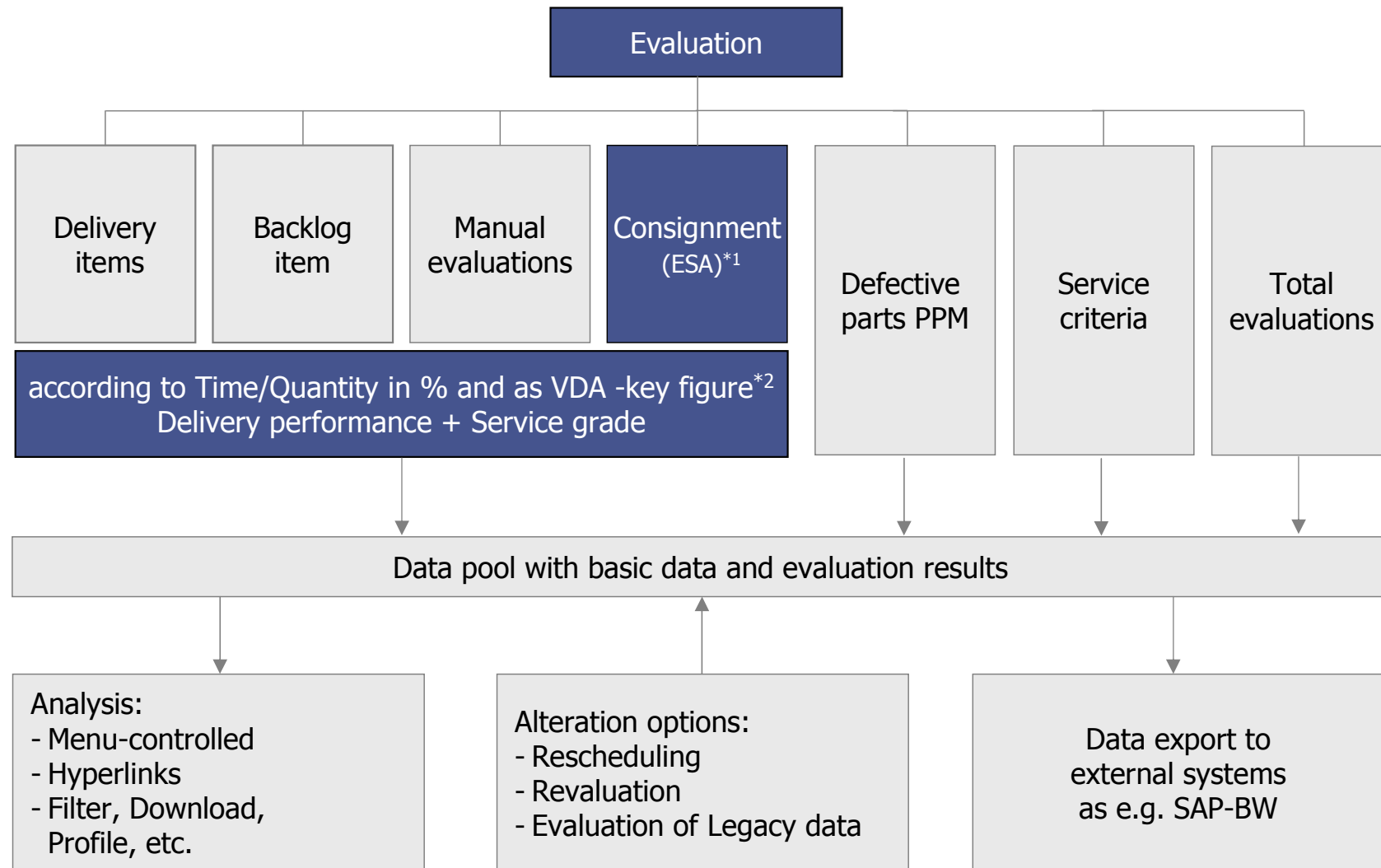
- free evaluation without goods issue e.g. external data
- posting by means of function modules
- customer-specific solutions for the transfer of evaluations
- consideration of manual evaluations in the analyses is selectable

Manual entry of evaluations

Data entry and evaluation



Overview



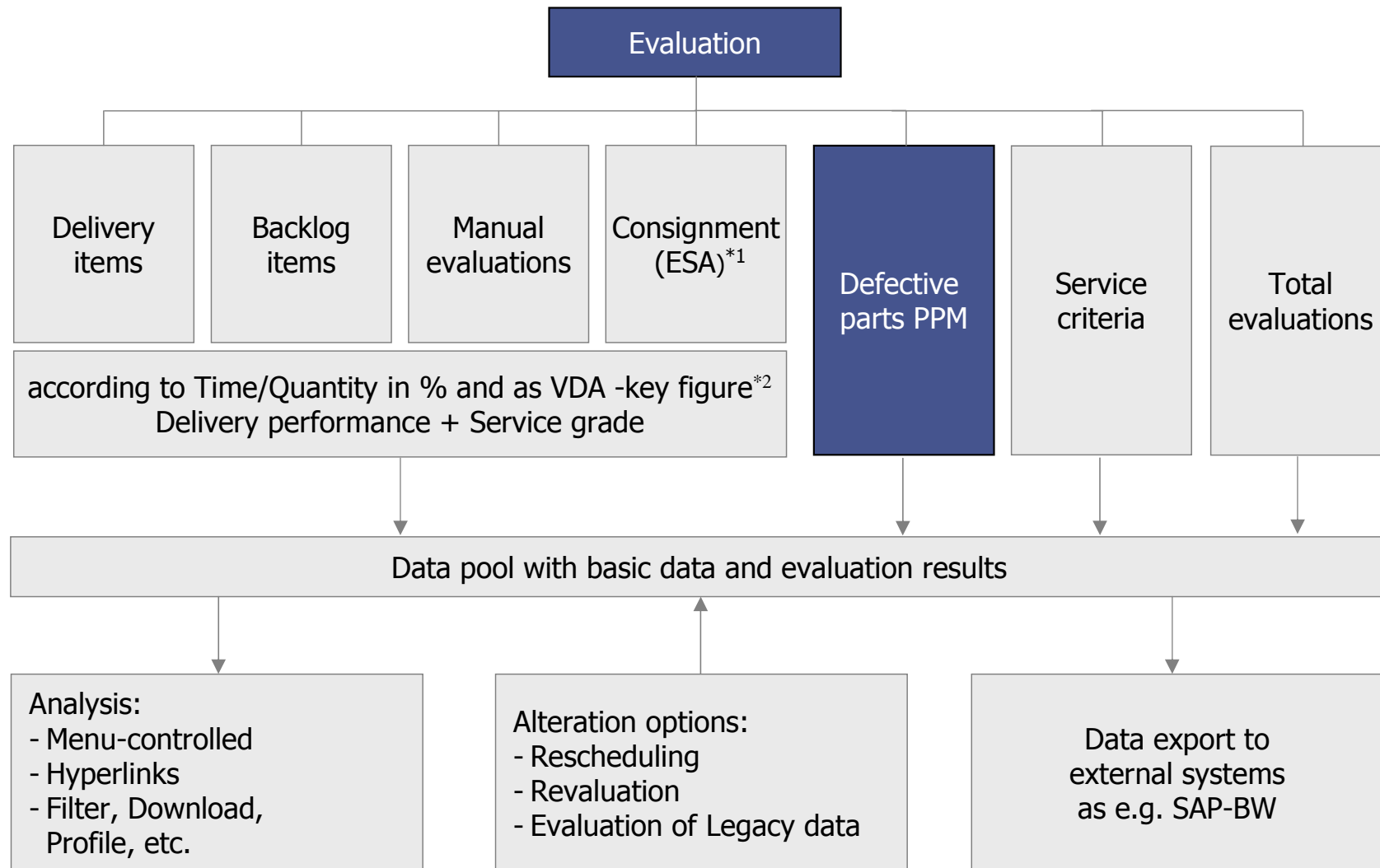
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Consignment stock (ESA)*

- Evaluations of deliveries in the ESA-environment
 - ESA-shipments
 - ESA-consignment issues (with additional 100% - agreement)
- can be activated according to sold-to party or ship-to party etc.
- Indication of ESA-deliveries on the interface

Overview



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Evaluation of defective parts in PPM (Parts per Million)

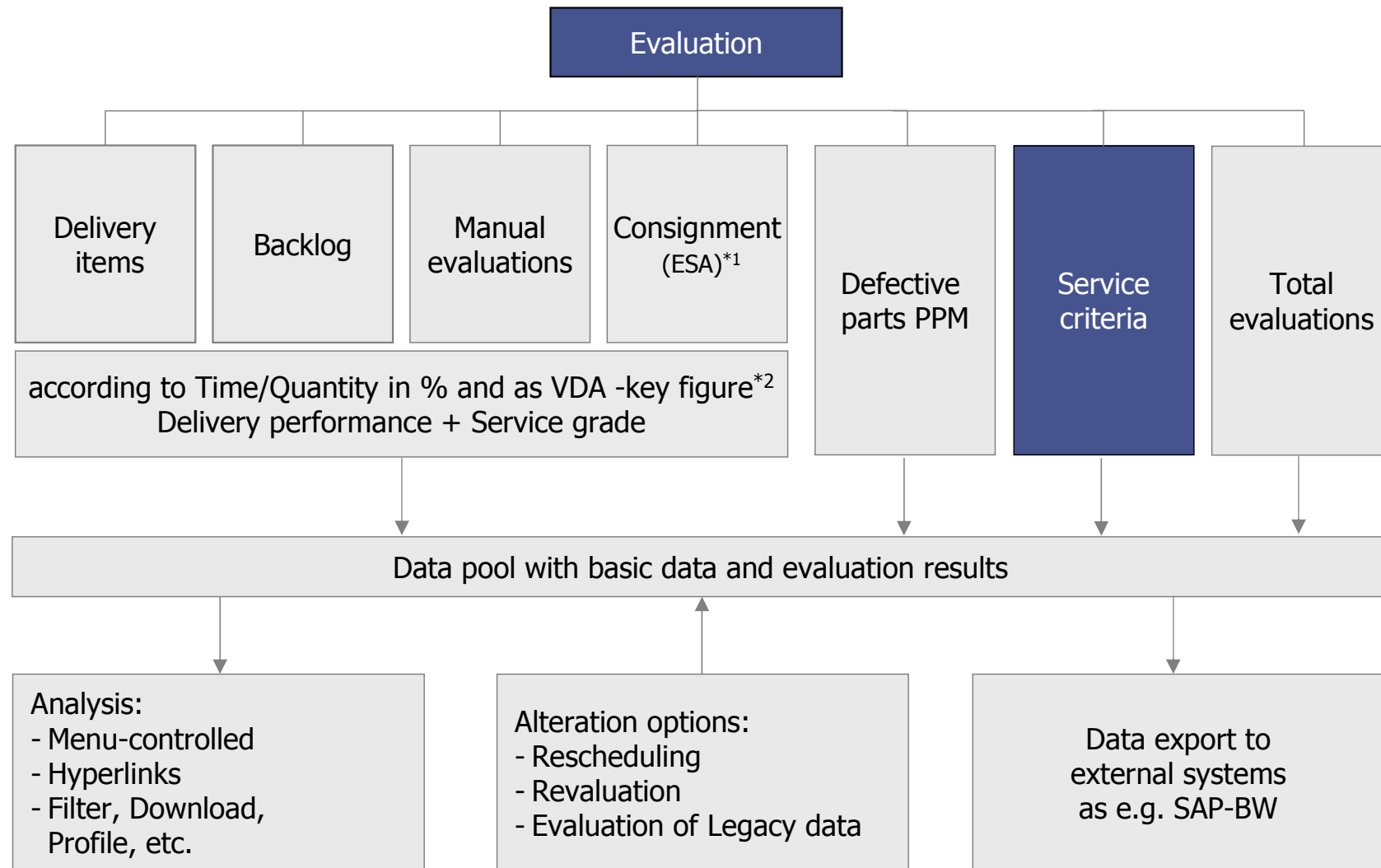
- Defective parts * 1.000.000 / total quantity
- Control is based on the quality notification for the delivery
- Result as PPM-figure (also according to unit) and in %
- PPM-analysis with monitoring of target agreements

Evaluation of defective parts in PPM (Parts per Million)

- Calculation of the PPM-figure for each movement (delivery/return shipment)
(Defective parts * 1.000.000 / Total parts at a determined point of time)

Delivery	Return shipment		Date	Quantity		PPM-figure	Achieved % of target agreement
91302670		1	30.01.2002	5.000	ST	280	9,3 %
91302671		1	30.01.2002	3.500	ST	279	9,3 %
91302672		1	30.01.2002	4.200	ST	278	9,3 %
91302673		1	30.01.2002	16.000	ST	274	9,1 %
	91302699	1	30.01.2002	1.579	ST	1.753	58,4 %
91302747		1	31.01.2002	22.500	ST	1.717	57,2 %
	91302789	1	31.01.2002	22	ST	1.737	57,9 %
	91302761	1	31.01.2002	4.000	ST	5.407	180,2 %
91303129		1	01.02.2002	10.500	ST	5.355	178,5 %
91303130		1	01.02.2002	4.000	ST	5.336	177,9 %
91303272		1	01.02.2002	15.000	ST	5.264	175,5 %
91303274		1	01.02.2002	22.920	ST	5.159	172,0 %
91303276		1	01.02.2002	6.947	ST	5.127	170,9 %
91303279		1	01.02.2002	5.000	ST	5.105	170,2 %

Overview



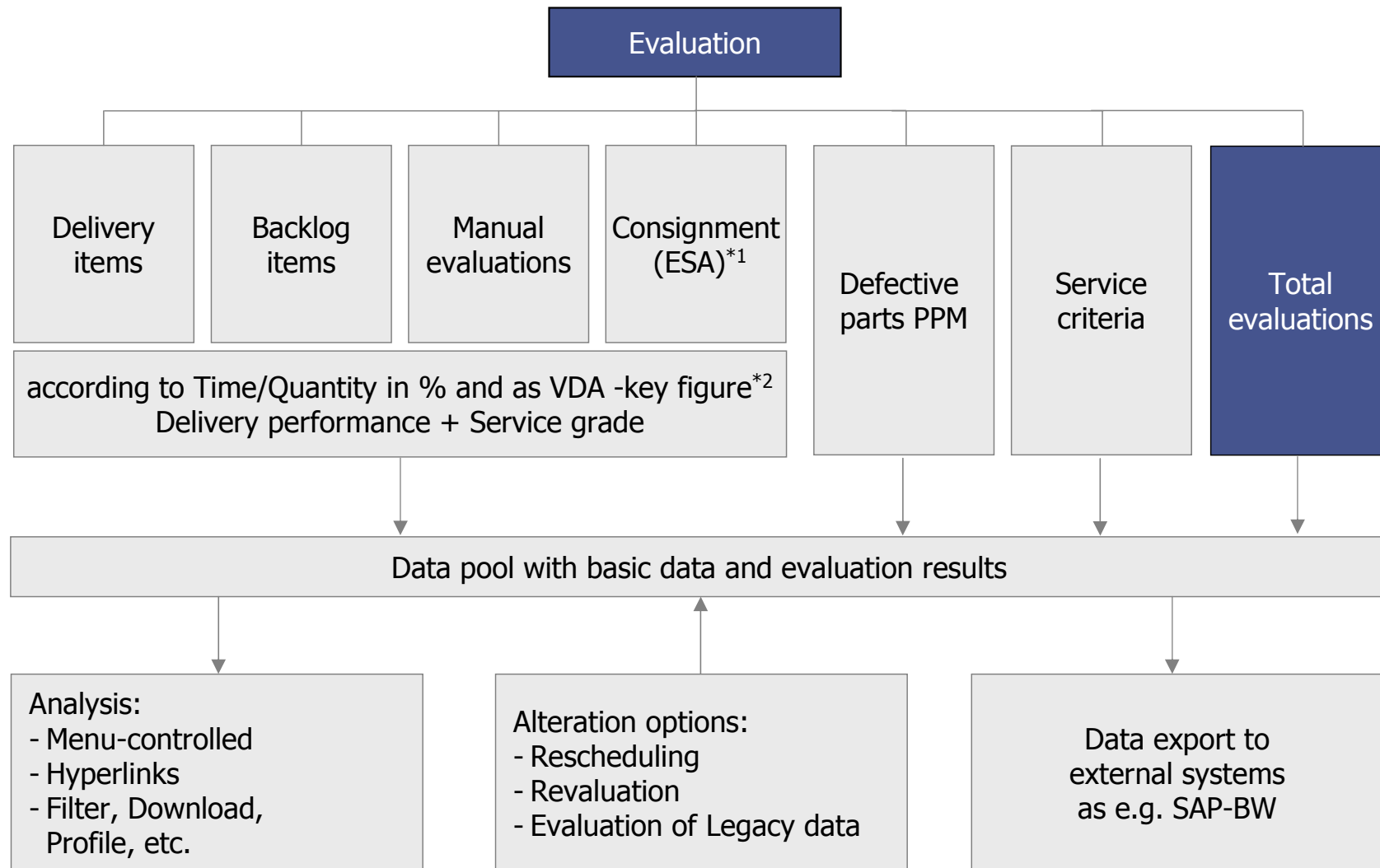
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Service criteria

- Evaluation according to arbitrary criteria (also subjective aspects), as e.g. certification, friendliness, flexibility etc.
- up to 20 arbitrary service criteria with weighting
- for each delivery, each customer and each plant
- Individual evaluations and permanent evaluations
- Independent key figure in %
- Posting by means of transaction or function module (open interface) with maintenance dialogue
- Bensberg function module for VMI

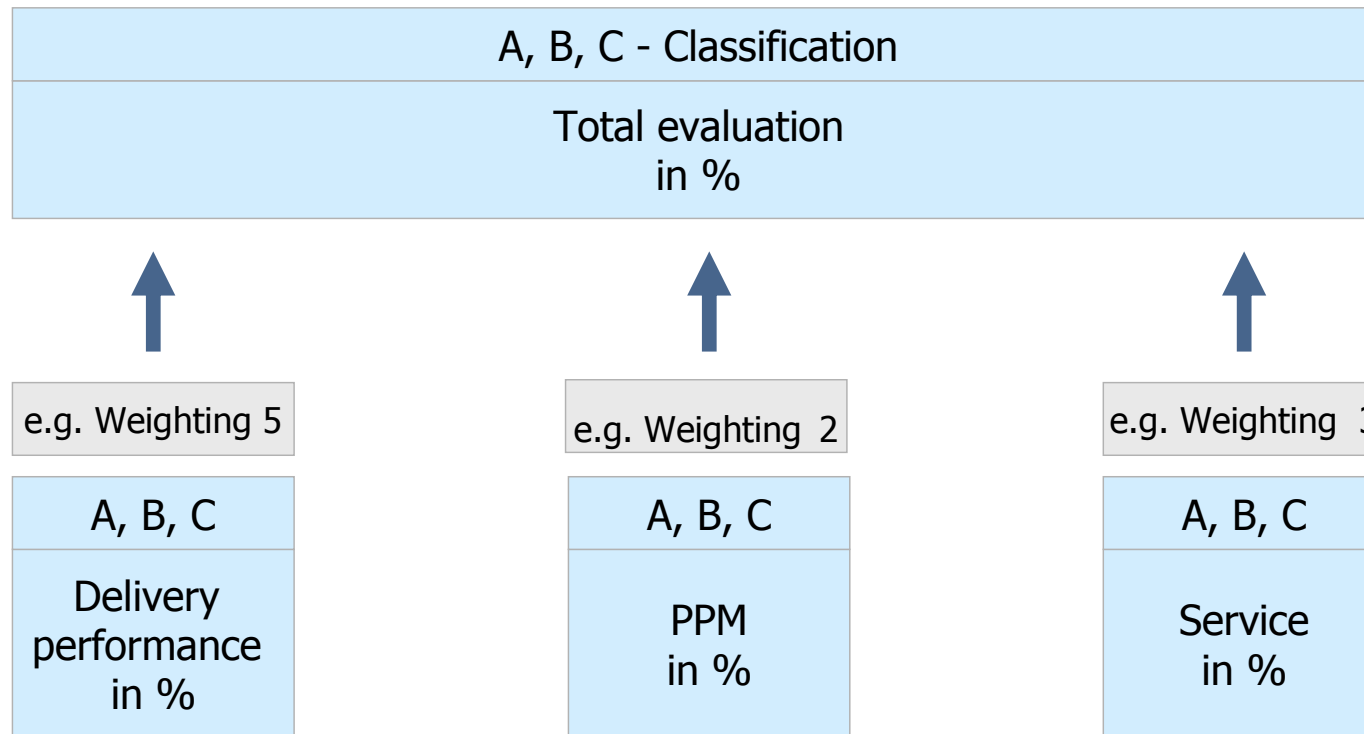
Overview



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Total evaluation



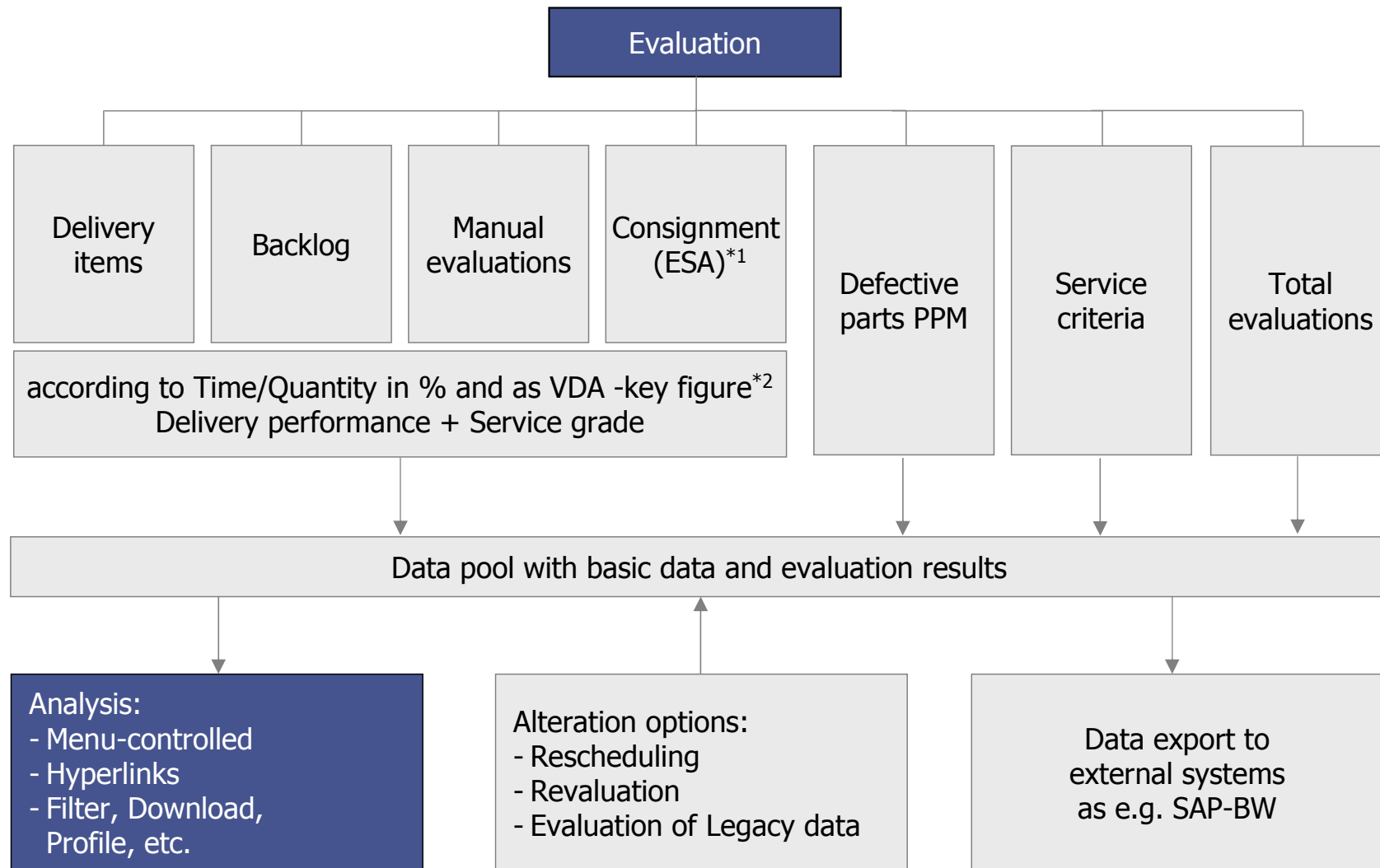
Standard classification:

A-classification, if $\geq 90\%$

B-classification, if $\geq 75\%$

C-classification, if $\leq 75\%$

Overview

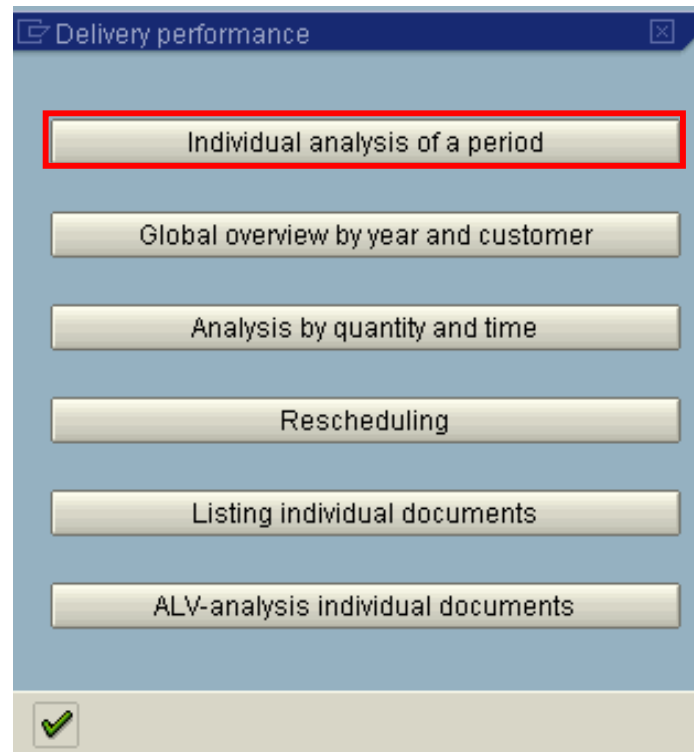


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Analysis

















- Individual analysis of each goods issue item with complete basis of evaluation
- Analysis according to sold-to party/ship-to party and month (cross table)
- Analysis according to time and quantity
- Ranking (Top 10)



Setting of the selection and sort criterion

Bensberg GmbH - SD/402109/Delivery performance SD








Sales organization	<input type="text" value=""/>	to	<input type="text" value=""/>	
Distribution channel	<input type="text" value=""/>	to	<input type="text" value=""/>	
Division	<input type="text" value=""/>	to	<input type="text" value=""/>	
Profit center	<input type="text" value=""/>	to	<input type="text" value=""/>	
Corporate group key	<input type="text" value=""/>	to	<input type="text" value=""/>	
Customer	<input type="text" value=""/>	to	<input type="text" value=""/>	
Ship-to party	<input type="text" value=""/>	to	<input type="text" value=""/>	
Material	<input type="text" value=""/>	to	<input type="text" value=""/>	
Customer material	<input type="text" value=""/>	to	<input type="text" value=""/>	
Product hierarchy	<input type="text" value=""/>	to	<input type="text" value=""/>	
Delivery	<input type="text" value=""/>	to	<input type="text" value=""/>	
Delivery item	<input type="text" value=""/>	to	<input type="text" value=""/>	
Order / Scheduling agreement	<input type="text" value=""/>	to	<input type="text" value=""/>	
Usage	<input type="text" value=""/>	to	<input type="text" value=""/>	
Shipping plant	<input type="text" value=""/>	to	<input type="text" value=""/>	
Employee	<input type="text" value=""/>	to	<input type="text" value=""/>	
Actual goods issue date	<input type="text" value="25.03.2005"/>	to	<input type="text" value="30.04.2005"/>	
Backlog of order / SA	<input checked="" type="checkbox"/>			
Manual postings	<input checked="" type="checkbox"/>			
Display without hierarchy	<input type="checkbox"/>			
Planning data	<input type="checkbox"/>			
Evaluation at the moment of GI	<input type="checkbox"/>			
Delivery performance	<input checked="" type="radio"/>	Service grade	<input type="radio"/>	
Deadline agreed on	<input type="radio"/>			
Display by VDA	<input checked="" type="radio"/>	Display in percent	<input type="radio"/>	

Sorted by

Sales organization	<input type="radio"/>	Distr.chnl.	<input type="radio"/>	Division	<input type="radio"/>
Product hierarchy	<input type="radio"/>	Material	<input type="radio"/>	Customer	<input checked="" type="radio"/>
Sales group	<input type="radio"/>	Sales office	<input type="radio"/>	Ship-to party	<input type="radio"/>
Shipping plant	<input type="radio"/>	Employee	<input type="radio"/>	Corp.group	<input type="radio"/>
Profit center	<input type="radio"/>	Comdty.group	<input type="radio"/>		

Total evaluation according to Sort key (in this case: customer) within the selected period

Delivery performance by customer

Delivery performance		by customer		13.02.2006 13:38:50	
		25.03.2005 - 30.04.2005			
Sales organization	0001	Sales Org. 001			
Distribution channel	01	Distribtn Channel 01			
Division	01	Product Division 01			
Customer	510000	Daimler Chrysler			
Customer in total				27,194	C 
Total units	PAA			20	
Units defective	PAA			0	
PPM - Key figure	PAA	Analysis 		0	
Total units	ST			69	
Units defective	ST			0	
PPM - Key figure	ST	Analysis 		0	
Total units				89	
Units defective				0	
PPM - Key figure		Analysis 		0	
PPM - % Year, Targ 30.000				100,0 %	
Total number of items				24	
Backlog items thereof				0	
% - Backlog item				0,00	
% - Items too early				58,33	
% - Items on time				8,33	
% - Items too late				33,33	
Average number days too early				1,04	
Average number days too late				101,40	
Total number days too early				47	
Total number days too late				507	
Total qty. 'too early'	PAA			36	
Total qty. 'too early'	ST			233	
Total qty. 'on time'	PAA			0	
Total qty. 'on time'	ST			10	
Total qty. 'too late'	PAA			4	
Total qty. 'too late'	ST			8	

Sort key →

next items involved →

Total evaluation (as before) with individual evaluation of the items involved

Delivery performance by customer

Delivery performance		by customer		13.02.2006 13:47:01	
		25.03.2005 - 30.04.2005			
Sales organization	0001	Sales Org. 001			
Distribution channel	01	Distribtn Channel 01			
Division	01	Product Division 01			
Customer	510000	Daimler Chrysler			
Document / Item	Material			VDA-key figure	
80000357	10 10021			40,300	C +
80000358	10 10021			40,300	C +
80000359	10 10002	AL-Connector SS1		1,000	A +
80000360	10 10002	AL-Connector SS1		1,000	A +
80000361	10 10002	AL-Connector SS1		1,000	A +
80000362	10 10002	AL-Connector SS1		0,637	A +
80000363	10 10002	AL-Connector SS1		0,637	A +
80000364	10 10002	AL-Connector SS1		1,001	A +
80000365	10 10002	AL-Connector SS1		1,001	A +
80000366	10 10002	AL-Connector SS1		1,001	A +
80000367	10 10002	AL-Connector SS1		1,001	A +
80000368	10 10002	AL-Connector SS1		1,001	A +
80000369	10 10002	AL-Connector SS1		1,001	A +
80000370	10 10002	AL-Connector SS1		1,001	A +
80000371	10 10002	AL-Connector SS1		1,001	A +
80000372	10 10002	AL-Connector SS1		1,001	A +
80000373	10 10002	AL-Connector SS1		1,001	A +
80000374	10 10002	AL-Connector SS1		1,001	A +
80000375	10 10002	AL-Connector SS1		1,000	A -
80000376	10 10002	AL-Connector SS1		1,000	A -
80000377	10 10002	AL-Connector SS1		1,000	A -
80000380	10 10002	AL-Connector SS1		8,000	B -
80000381	10 10002	AL-Connector SS1		12,000	B -
80000382	10 10021			206,000	C -
Customer in total				27,194	C

Delivery items

Involved backlog and manual items appear subsequent to the delivery items with colored indication

Evaluation basis

+ Overdeliveries

- Underdeliveries

Delivery + Material are interactive (Hyperlinks branch to SAP-Standard)

Evaluation basis according to settings

Delivery performance by customer

Sort Profile

Details on delivery

Individual data on delivery performance

Delivery →

Delivery	: 80000362	510000	Daimler Chrysler	(OR)
		510000	Daimler Chrysler	(SRE)
Item	: 000010	10002	AL-Connector SS1	
Actual GI-date	:	25.03.2005		
Delivery quantity	:	11 ST		Smoothing
Order	:	111	000010	Date : 25.03.2005

Assignment to customer schedules

Customer deadline	Schedule line quantity	Type	Arrival date customer	Offsetting quantity	Day difference early / late
29.03.2005	5	ORD	29.03.2005	5	
30.03.2005	5	ORD	29.03.2005	5	1-
31.03.2005	5	ORD	29.03.2005	1	2-

Schedule line →

too early

Calculation of VDA-key figure

Customer deadline	Offsetting quantity	Day difference	Square VDA	Measure VDA	Factor VDA	Measure weighted
29.03.2005	5			0,000	0	0,000
30.03.2005	5	1-	5	0,455	1	0,455
31.03.2005	1	2-	2	0,182	1	0,182

Evaluation →

VDA-key figure for this item	0,637
VDA-classification for this item	A

Check of basis of evaluation

Evaluation parameter

Schedule line at the moment of the GI-posting (basis deadlines)






Base dates for the calculation							
Evaluation basis of delivery performance							
Delivery	:	80000362	510000	Daimler Chrysler	(OR)		
			510000	Daimler Chrysler	(SRE)		
Item	:	000010	10002	AL-Connector SS1			
		Actual GI-date	:	25.03.2005			
		Delivery quantity	:	11 ST		Smoothing	
		Order	:	111	000010		
		Open delivery quantity	:	0			
Order							
		Customer deadl.	Customer qty.	Confirmed qty.	Open dely.qty.	used	UM
		D 29.03.2005	5	5	5	5	ST
		D 30.03.2005	5	5	5	5	ST
		D 31.03.2005	5	5	5	1	ST

Evaluation parameters of a delivery item

Evaluation parameters of the document		
Parameter for ship-to party (YYF3WE)		
Overdeliveries will be offset against subsequent schedules		
Planning delivery schedules will be considered		
Delivery scheduling will be executed	:	out of actual scheduling
Delivery SU-SA for weekly deadlines is okay	:	No checked
Delivery 1.-31. for monthly deadlines is okay	:	No checked
Shipments to ESA will not be evaluated		
ESA consignment issues will not be evaluated		
no delivery schedule evaluation		
Parameter for evaluation (YYF3KZ)		
Weighting factor for deliveries 'too early'	:	1
Weighting factor for deliveries 'too late'	:	2
VDA-key figure 'to' for A-classification	:	5,000
VDA-key figure 'to' for B-classification	:	15,000
% - Key figure 'to' for A-classification	:	
% - Key figure 'to' for B-classification	:	

Comments and Alteration of the evaluation

Delivery performance by customer

Delivery performance		by customer		13.02.2006 14:41:19	
		25.03.2005 - 30.04.2005			
Sales organization	0001	Sales Org. 001			
Distribution channel	01	Distribtn Channel 01			
Division	01	Product Division 01			
Customer	510000	Daimler Chrysler			
Document / Item	Material	VDA-key figure			
80000357	10 10021	 12,000	B		+
80000358	10 10021	40,300	C		+
80000359	10 10002 AL-Connector SS1	1,000	A		
80000360	10 10002 AL-Connector SS1	1,000	A		
80000361	10 10002 AL-Connector SS1	1,000	A		
80000362	10 10002 AL-Connector SS1	 0,637	A		+
80000363	10 10002 AL-Connector SS1	0,637	A		+
80000364	10 10002 AL-Connector SS1	1,001	A		
80000365	10 10002 AL-Connector SS1	1,001	A		
80000366	10 10002 AL-Connector SS1	1,001	A		
80000367	10 10002 AL-Connector SS1	1,001	A		
80000368	10 10002 AL-Connector SS1	1,001	A		
80000369	10 10002 AL-Connector SS1	1,001	A		
80000370	10 10002 AL-Connector SS1	1,001	A		
80000371	10 10002 AL-Connector SS1	1,001	A		
80000372	10 10002 AL-Connector SS1	1,001	A		
80000373	10 10002 AL-Connector SS1	1,001	A		
80000374	10 10002 AL-Connector SS1	1,001	A		
80000375	10 10002 AL-Connector SS1	1,000	A		-
80000376	10 10002 AL-Connector SS1	1,000	A		-
80000377	10 10002 AL-Connector SS1	1,000	A		-
80000380	10 10002 AL-Connector SS1	8,000	B		
80000381	10 10002 AL-Connector SS1	12,000	B		
80000382	10 10021	206,000	C		-
Customer in total		27,194	C		

Fields displaying the evaluation result are interactive

Lightning sign indicates a manual alteration of the evaluation figure

Leaf sign indicates a stored comment for this item

Comments and Alteration of the evaluation

Delivery performance by customer

Sort Profile

Delivery performance		by customer	
25.03.2005 - 30.04.2005			
Sales organization	0001	Sales Org. 001	
Distribution channel	01	Distribtn Channel 01	
Division	01	Product Division 01	
Customer	510000	Daimler Chrysler	

Document / Item	Material	
80000357 10	10021	
80000358 10	10021	
80000359 10	10002	AL-Connector SS1
80000360 10	10002	AL-Connector SS1
80000361 10	10002	AL-Connector SS1
80000362 10	10002	AL-Connector SS1
80000363 10	10002	AL-Connector SS1
80000364 10	10002	AL-Connector SS1
80000365 10	10002	AL-Connector SS1
80000366 10	10002	AL-Connector SS1
80000367 10	10002	AL-Connector SS1
80000368 10	10002	AL-Connector SS1
80000369 10	10002	AL-Connector SS1
80000370 10	10002	AL-Connector SS1
80000371 10	10002	AL-Connector SS1
80000372 10	10002	AL-Connector SS1
80000373 10	10002	AL-Connector SS1
80000374 10	10002	AL-Connector SS1
80000375 10	10002	AL-Connector SS1
80000376 10	10002	AL-Connector SS1
80000377 10	10002	AL-Connector SS1
80000380 10	10002	AL-Connector SS1
80000381 10	10002	AL-Connector SS1
80000382 10	10021	
Customer in total		

Comment on classification

SD document: 000000357
 Item: 10
 Key figure/Class (VDA / %): 12,000 B ! Display
 Comment on classification: Shipping agent didn't pick up

Manually altered key figure and reason for

Save Comment

12,000	B	+
40,300	C	+
1,000	A	
1,000	A	
1,000	A	
0,637	A	+

Comment on classification

SD document: 000000362
 Item: 10
 Key figure/Class (VDA / %): 0,637 A Change
 Comment on classification: Problems in the shipping department

Entered comment

Save Comment

12,000	B	
206,000	C	-
27,194	C	

Total evaluation with individual evaluation of the items involved

Delivery performance by customer

Delivery performance		by customer		13.02.2006 13:47:01	
		25.03.2005 - 30.04.2005			
Sales organization	0001	Sales Org. 001			
Distribution channel	01	Distribtn Channel 01			
Division	01	Product Division 01			
Customer	510000	Daimler Chrysler			
Document / Item	Material		VDA-key figure		
80000357	10 10021		40,300 C		+
80000358	10 10021		40,300 C		+
80000359	10 10002	AL-Connector SS1	1,000 A		
80000360	10 10002	AL-Connector SS1	1,000 A		
80000361	10 10002	AL-Connector SS1	1,000 A		
80000362	10 10002	AL-Connector SS1	0,637 A		+
80000363	10 10002	AL-Connector SS1	0,637 A		+
80000364	10 10002	AL-Connector SS1	1,001 A		
80000365	10 10002	AL-Connector SS1	1,001 A		
80000366	10 10002	AL-Connector SS1	1,001 A		
80000367	10 10002	AL-Connector SS1	1,001 A		
80000368	10 10002	AL-Connector SS1	1,001 A		
80000369	10 10002	AL-Connector SS1	1,001 A		
80000370	10 10002	AL-Connector SS1	1,001 A		
80000371	10 10002	AL-Connector SS1	1,001 A		
80000372	10 10002	AL-Connector SS1	1,001 A		
80000373	10 10002	AL-Connector SS1	1,001 A		
80000374	10 10002	AL-Connector SS1	1,001 A		
80000375	10 10002	AL-Connector SS1	1,000 A		-
80000376	10 10002	AL-Connector SS1	1,000 A		-
80000377	10 10002	AL-Connector SS1	1,000 A		-
80000380	10 10002	AL-Connector SS1	8,000 B		
80000381	10 10002	AL-Connector SS1	12,000 B		
80000382	10 10021		206,000 C		-
Customer in total			27,194 C		

- Download / Excel
- Filter
- Graphics
- Sort keys
- Remarks
- Alterations
- Hyperlinks
- User profile
- Application help
- ALV-analysis

Delivery item and material are interactive (Hyperlinks)

Individual analysis as ALV

...	Document	It...	Goods issue	Sold-to party	Name 1	City	Ship-to party	Material	Material description	Plant	Early	On time	Late	GI quantity	UM
L	80000357	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10021	AL-Verbindung GK5	1000	0	0	0	20	PC
L	80000358	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10021	AL-Verbindung GK5	1000	1	1	1	20	PC
L	80000359	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	15	PC
L	80000360	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	15	PC
L	80000361	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	1	0	0	15	PC
L	80000362	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	11	PC
L	80000363	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	2	1	0	11	PC
L	80000364	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	12	PC
L	80000365	10	25.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	12	PC
L	80000366	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	3	0	0	12	PC
L	80000367	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	16	PC
L	80000368	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	16	PC
L	80000369	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	16	PC
L	80000370	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	16	PC
L	80000371	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	16	PC
L	80000372	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	16	PC
L	80000373	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	16	PC
L	80000374	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	3	0	0	16	PC
L	80000375	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	1	0	0	2	PC
L	80000376	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	0	5	PC
L	80000377	10	26.03.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	1	0	0	5	PC
L	80000381	10	19.04.2005	510000	Daimler Chrysler	Stuttgart	510000	10002	AL-Verbindung SS1	1000	0	0	1	4	PC
L	80000382	10	30.04.2005	510000	Daimler Chrysler	Stuttgart	510000	10021	AL-Verbindung GK5	1000	0	0	1	2	PC

Smoothing

Offsetting of quantity deviations
in definable time windows (number/days)

Delivery performance by customer

Sort Profile

Details on delivery

Individual data on delivery performance

Delivery	: 80000362	510000	Daimler Chrysler	(OR)
		510000	Daimler Chrysler	(SRE)
Item	: 000010	10002	AL-Connector SS1	
Actual GI-date	:	25.03.2005		
Delivery quantity	:	11 ST	Smoothing	
Order	:	111	000010	Date : 25.03.2005

Assignment to customer schedules

Customer deadline	Schedule line quantity	Type	Arrival date customer	Offsetting quantity	Day difference early / late
29.03.2005	5	ORD	29.03.2005	5	
30.03.2005	5	ORD	29.03.2005	5	1-
31.03.2005	5	ORD	29.03.2005	1	2-

Calculation of VDA-key figure

Customer deadline	Offsetting quantity	Day difference	Square VDA	Measure VDA	Factor VDA	Measure weighted
29.03.2005	5			0,000	0	0,000
30.03.2005	5	1-	5	0,455	1	0,455
31.03.2005	1	2-	2	0,182	1	0,182

VDA-key figure for this item: 0,637
VDA-classification for this item: A

Basis-deadlines Parameter

Smoothing

Smoothing

Offsetting of quantity deviations
in definable time windows (number of days)

Delivery performance by customer

Sort Profile

Details on delivery

Individual data on delivery performance

Delivery	: 80000362	510000	Daimler Chrysler	(OR)
		510000	Daimler Chrysler	(SRE)

Details of Smoothing

Smoothing : 25.03.2005

Context of Smoothing

Order/Sched.agreem.	111
Item	000010
2 Day	24.03.2005 - 25.03.2005

Day difference early / late

1-	
2-	

Deliveries

Delivery	Position	Goods issue date	Quantity	Unit
80000363	000010	25.03.2005	3	ST
80000362	000010	25.03.2005	8	ST

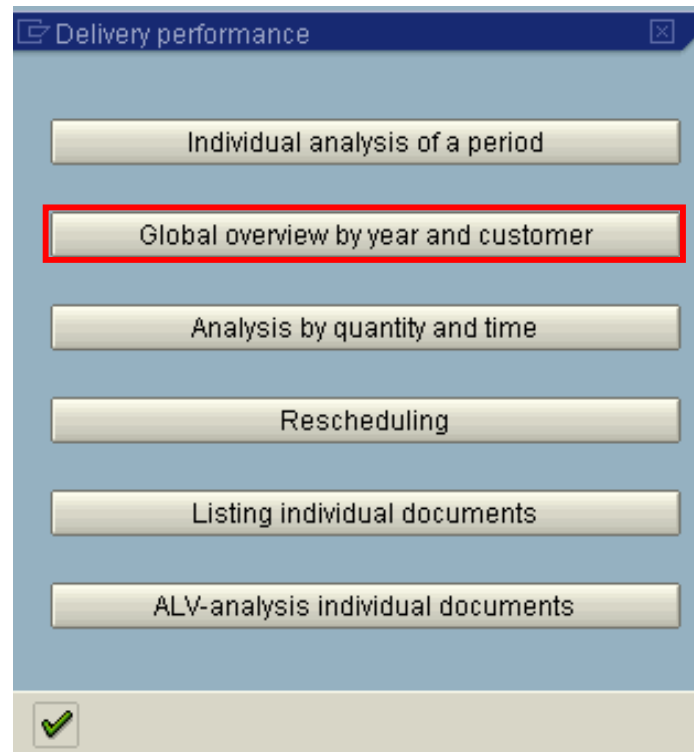
Total quantity

ctor	Measure
DA	weighted
0	0,000
1	0,455
1	0,182
	0,637
	A

Window

Deliveries





Total quantity



'Cross table': Analysis per calendar year und customer (Distribution on months)
Setting of the selection and sort criterion

planned: Distribution on weeks, on weeks;
rolling months (12) and weeks (52)

Bensberg GmbH - SD/402109/Delivery performance SD

Start →    

Actual goods issue date	25.03.2005	to	30.04.2005
Backlog of order / SA	<input type="checkbox"/>		
Manual postings	<input checked="" type="checkbox"/>		
Planning data	<input type="checkbox"/>		
Evaluation at the moment of GI	<input type="checkbox"/>		
Delivery performance	<input checked="" type="radio"/>	Service grade	<input type="radio"/>
Deadline agreed on	<input type="radio"/>		
Display by VDA	<input type="radio"/>	Display in percent	<input checked="" type="radio"/>

Sort

Distribution channel,Sold-to party	<input checked="" type="radio"/>
Distribution channel,Sold-to party,Plant	<input type="radio"/>
Distribution channel,Ship-to party	<input type="radio"/>
Distribution channel,Ship-to party,Plant	<input type="radio"/>

'Cross table': Analysis per calendar year and sold-to party (monthly distribution, percent)

Target is to provide information for the management in respect to development and ranking of the suppliers

Sort according to
Sold-to party or %-evaluation (Top 10)

Year review for sold-to party

Customer Evaluation Evaluation

Year review of the sold-to parties(in percent) 15.02.2006 11:56:22
 Delivery performance Evaluation period 25.03.2005 - 30.04.2005

Analyse - Year 2005
 Sales organization 0001 Sales Org. 001
 Distribution channel 01 Distribtn Channel 01
 Division 01 Product Division 01

Sold-to party		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Number	Total
16391	August Schmitt GmbH	88	81	85	83	95	90	97	89	93				744	88,2
13846	Maier Drehteile	58	66	100	76	80	97	99	92	97				107	82,3
10072	ISG Formteile GmbH	69	72	73	66	72	67	72	77	67				640	70,7
13378	Wilhelm Fischer AG	48	79	78	50	63	50	76	71	75				139	64,0
16471	GOLEM GmbH	62	66	59	61	39	32	56	66	45				402	54,8
16482	Westerhof & CoKG	55	68	63	46	47	62	56	52	13				156	53,7
16185	Magma & Sohn Cie.	44	58	56	41	46	41	53	58	63				865	49,6
16174	Karl Eberhardt	43	0	33	40	0	20	67	40	100				36	33,3
16447	Erwin Schmitz & Co	0	0	25	0	50	98	0	33	0				21	23,6
16595	Krons und Sohn		0				0	88	0					4	22,1
16562	RG Gleitlager GmbH	14	16	17	24	30	8	28	25	17				211	20,7
13301	RESA AG		49				0			0				5	19,5
11268	Liebermann S.A.	0		0				91						5	18,2
13584	Selem Antrieb AG	0		0	0				100					6	16,7
10	Heinz Winterhof GmbH	10	11	15	22	19	17	15	17	15				561	15,6
9	Schmitz Sitze	0	39	14	7	29	40	0	0	0				50	12,9
576	Herbas Edlemetall	0	0		0	67	0	0	0	0				22	9,1
456	DORE Presstechnik	0	25	0	0		0	0	0	32				34	5,8
13015	Otto Schroeder AG	17	0	0		0	22	0	0					39	4,8
852	Wintermeier GmbH	0	0	0		0	0	0	100					31	3,2

Goods issues





Percent evaluation

next context-dependent individual analysis

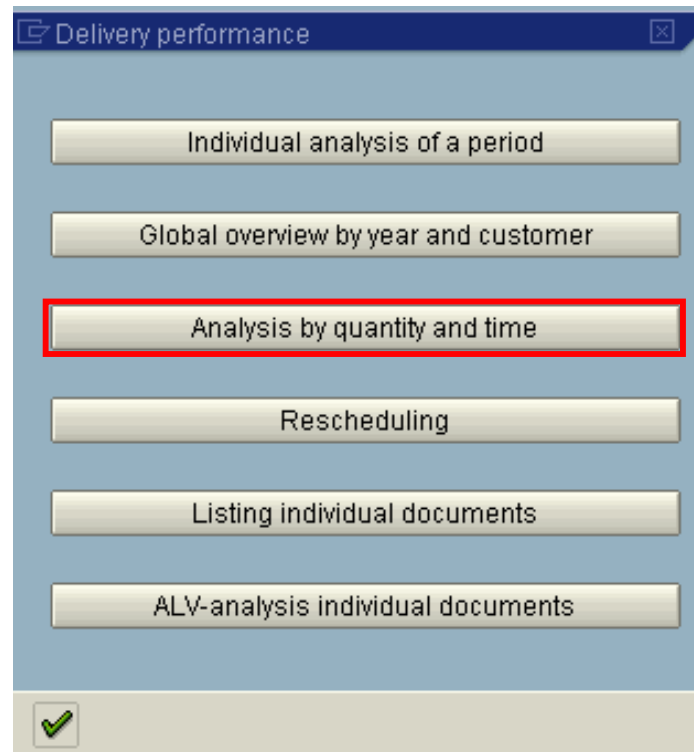
blank = no GI

Individual analysis started from the cross table

Delivery performance by customer

Sort		Profile			
Delivery performance		by customer		15.02.2006 15:49:50	
		25.03.2005 - 30.04.2005			
Sales organization	0001	Sales Org. 001			
Distribution channel	01	Distribtn Channel 01			
Division	01	Product Division 01			
Customer	510000	Daimler Chrysler			
Customer in total			76,5 %	B	
Total units	PAA				20
Units defective	PAA				0
PPM - Key figure	PAA	Analysis			0
Total units	ST				69
Units defective	ST				0
PPM - Key figure	ST	Analysis			0
Total units					89
Units defective					0
PPM - Key figure		Analysis			0
PPM - % Year, Targ 30.000					100,0 %
Total number of items					24
% - Items too early					63,64
% - Items on time					0,00
% - Items too late					36,36
Average number days too early					1,20
Average number days too late					101,40
Total number days too early					59
Total number days too late					507
Total qty. 'too early'	PAA				36
Total qty. 'too early'	ST				243
Total qty. 'on time'	PAA				0
Total qty. 'too late'	PAA				4
Total qty. 'too late'	ST				8

items involved



Analysis according to quantity and time

Target:
Presentation of quantity and
time deviations

Over-/Underdeliveries either
in % or by quantity unit

If the quantity entered here is
reached, the background of
the field will be displayed
colored (yellow, red)

Bensberg GmbH - SD/402109/Delivery performance SD

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Actual goods issue date	25.03.2005 to 30.04.2005
Backlog of order / SA	<input type="checkbox"/>
Manual postings	<input checked="" type="checkbox"/>
Planning data	<input type="checkbox"/>
Evaluation at the moment of GI	<input type="checkbox"/>
Delivery performance	<input checked="" type="radio"/> Service grade <input type="radio"/>
Deadline agreed on	<input type="radio"/>
Display by VDA	<input type="radio"/> Display in % <input checked="" type="radio"/>
Analysis	
by quantity	<input checked="" type="radio"/> by time <input type="radio"/>
Display in percent	<input type="checkbox"/>
Warning -/+	<input type="text"/>
Error -/+	<input type="text"/>
Aggregation	
Summary on	<input checked="" type="radio"/> Day <input type="radio"/> Week <input type="radio"/> Month
Sort	
Distribution channel,Sold-to party	<input checked="" type="radio"/>
Distribution channel,Sold-to party,Plant	<input type="radio"/>
Distribution channel,Ship-to party	<input type="radio"/>
Distribution channel,Ship-to party,Plant	<input type="radio"/>
Distribution channel,Plant	<input type="radio"/>
Distribution channel	<input type="radio"/>

Analysis quantity

Additional →
breakdown
+ evaluation
according to
material

Delivery performance according to day

With material		Cross table		Print			
Delivery performance according to day						14.02.2006 15:37:39	
Evaluation period		25.03.2005 - 30.04.2005					
Sales organization	0001	Sales Org. 001					
Distribution channel	01	Distribtn Channel 01					
Division	01	Product Division 01					
Sold-to party	510000	Daimler Chrysler, Stuttgart					
Deadline	Goods issue		Underdelivery		Overdelivery		Key figure
	Number	Quantity	Number	Quantity	Number	Quantity	in %
25.03.2005	9	46 ST	0	0	2	24	72,0
26.03.2005	12	35 ST	2	9	0	0	98,0
19.04.2005	2	6 ST	0	0	0	0	80,0
30.04.2005	1	2 ST	1	2.426	0	0	0,0
	24	89 ST	3	2.435	2	24	76,8

individual
analysis

Analysis Time

Delivery performance according to day

Delivery performance according to day										
Evaluation period										14.02.2006 15:40:26
25.03.2005 - 30.04.2005										
Sales organization	0001	Sales Org. 001								
Distribution channel	01	Distribtn Channel 01								
Division	01	Product Division 01								
Sold-to party	510000	Daimler Chrysler, Stuttgart								
Deadline	Number GI	Schedule lines			Total days		Average		Key figure acc. %	
		early	ok	late	early	late	early	late		
25.03.2005	9	4	2	1	5	197	1,3	197,0	72,0	
26.03.2005	12	8	0	0	8	0	1,0	0,0	98,0	
19.04.2005	2	0	0	2	0	10	0,0	5,0	80,0	
30.04.2005	1	0	0	1	0	103	0,0	103,0	0,0	
	24	12	2	4	13	310	1,1	77,5	76,8	

The sum of the schedule lines may exceed the sum of the GIs

Analysis Times with breakdown

Delivery performance according to day

Without material
 Without delivery document
 Without delivery document
 Cross table

Delivery performance according to day 14.02.2006 15:44:05
 Evaluation period 25.03.2005 - 30.04.2005

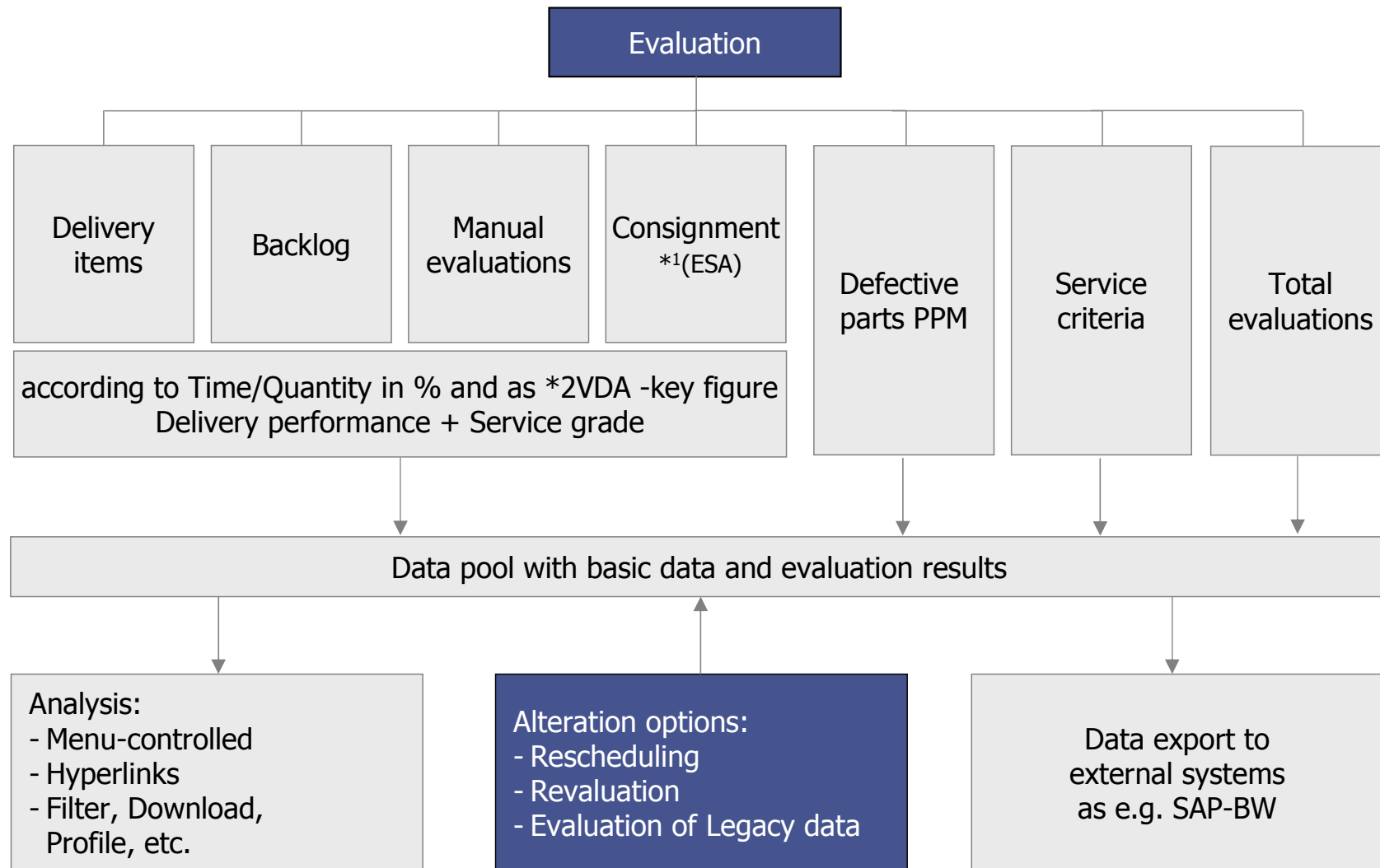
Sales organization 0001 Sales Org. 001
 Distribution channel 01 Distribtn Channel 01
 Division 01 Product Division 01
 Sold-to party 510000 Daimler Chrysler, Stuttgart

Order / SA (orange)

Delivery item (blue)

Deadline	Number	Schedule lines			Total days		Average		Key figure acc. %	
		GI	early	ok	late	early	late	early		late
25.03.2005	9		4	2	1	5	197	1,3	197,0	72,0
10002	7		3	1	0	4	0	1,3	0,0	98,4
102 0010	3		1	0	0	1	0	1,0	0,0	98,0
80000359 0010	1		0	0	0	0	0	0,0	0,0	
80000360 0010	1		0	0	0	0	0	0,0	0,0	
80000361 0010	1		1	0	0	1	0	1,0	0,0	98,0
111 0010	2		2	1	0	3	0	1,5	0,0	98,7
80000362 0010	1		0	0	0	0	0	0,0	0,0	
80000363 0010	1		2	1	0	3	0	1,5	0,0	98,7
112 0010	2		0	0	0	0	0	0,0	0,0	
80000364 0010	1		0	0	0	0	0	0,0	0,0	
80000365 0010	1		0	0	0	0	0	0,0	0,0	
10021	2		1	1	1	1	197	1,0	197,0	19,4
96 0010	2		1	1	1	1	197	1,0	197,0	19,4
80000357 0010	1		0	0	0	0	0	0,0	0,0	
80000358 0010	1		1	1	1	1	197	1,0	197,0	19,4

Overview



*1ESA = **E**xternal **S**ervice **A**gent

*2VDA = German Association of the Automotive Industry

Modification of the data pool

- Rescheduling function offering the possibility of indicating one/several substitute deadline(s) and distributing the quantity
- Possibility of revaluation of already evaluated items with changed evaluation parameters
- Subsequent evaluation of orders and scheduling agreements

Rescheduling on the analysis screen

Details on delivery

Individual data on delivery performance

Delivery	: 80000363	510000	Daimler Chrysler	(OR)
		510000	Daimler Chrysler	(SRE)
Item	: 000010	10002	AL-Connector SS1	
	Actual GI-date	:	25.03.2005	
	Delivery quantity	:	11 ST	Smoothing
	Order	:	111 000010	Date : 25.03.2005

Assignment to customer schedules

Customer deadline	Schedule line quantity	Type	Arrival date customer	Offsetting quantity	Day difference early / late
30.03.2005	2	ORD	29.03.2005	2	1-
31.03.2005	5	ORD	29.03.2005	5	2-
01.04.2005	2	ORD	29.03.2005	2	3-
02.04.2005	3	ORD	29.03.2005	2	3-

Calculation of VDA-key figure

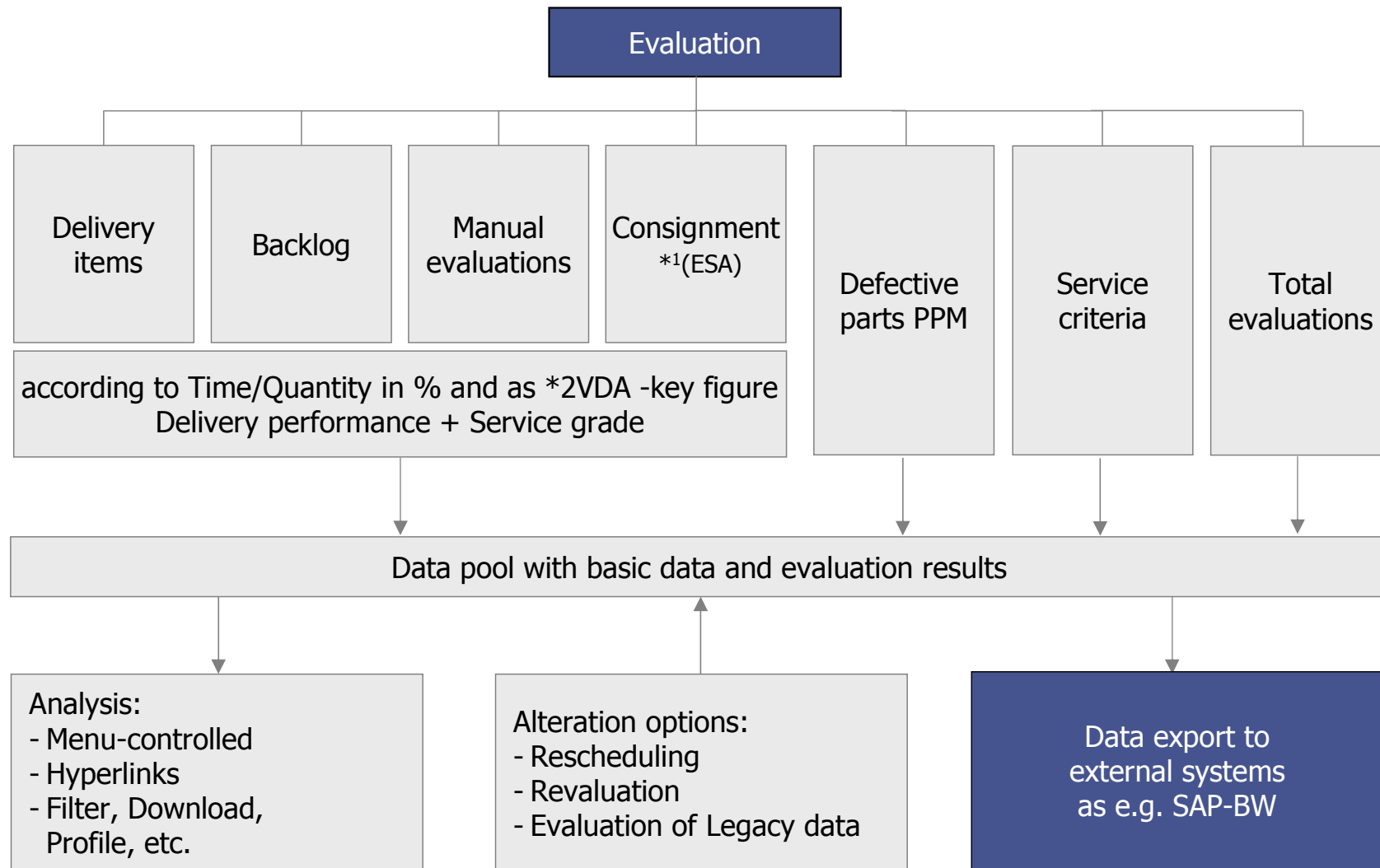
Customer deadline	Offsetting quantity	Day difference	Square VDA	Measure VDA	Factor VDA	Measure weighted
30.03.2005	2	1-	2	0,182	1	0,182
31.03.2005	5	2-	10	0,909	1	0,909
01.04.2005	2	3-	6	0,545	1	0,545
02.04.2005	2	3-	6	0,545	1	0,545

VDA-key figure for this item: 2,181
VDA-classification for this item: A

Basis-deadlines
 Parameter

red shaded = interactive
Display of scheduling information

Overview



*1ESA = **E**xternal **S**ervice **A**gent

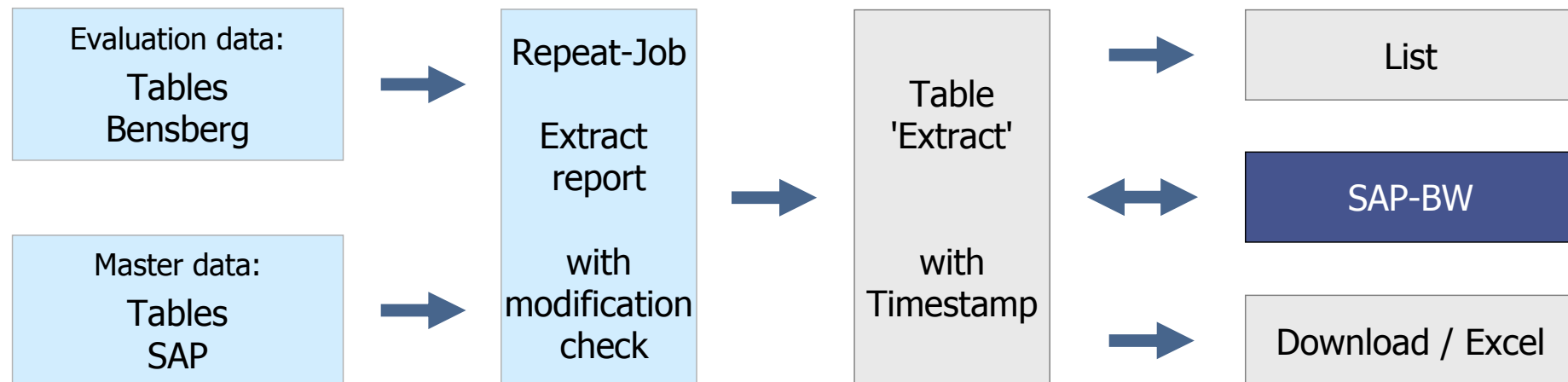
*2VDA = German Association of the Automotive Industry

Data export for external systems as e.g. SAP-BW

- Provision of all analysis results in a separate extract transfer table
 - for each evaluated position one data record
 - (Master data, Evaluation data with Timestamp)
 - Timestamps for the topicality comparison
- Data extract report:
 - Verification, if new evaluations or modifications of evaluations are available
 - Saving of extract data with new Timestamp in extract tables
- Download or direct access
- List function

Data export for external systems as e.g. SAP-BW

Overview



Future enhancements

- Alarm system with notification (internal SAP-Mail with analysis based on limit values)
- Analysis according to sold-to party/ship-to party and material with all key figures of a period
- Form

Embedding of the Bensberg components in the SAP R/3

- Add-on to R/3
 - Programmed in "ABAP" (Advanced Business and Application Programming)
 - own name range, assigned by SAP (/BEE/)
 - thus, no intervention in R/3, but access on R/3-data
- runs under R/3-Releases 4.0 - 5.0 with or without Automotive
- automatic generation by SAP-Standard transport
- available language versions: D, E, F, ES

We thank very much you for time and interest.

In case you still have questions and/or need further information
please contact us.

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